

CLAIMS

1. A heat exchanger device for a gas seal (1) for centrifugal compressors characterized in that it comprises a fluid heat exchanger (3) positioned between the gas seal of the compressor and the housing wall of said seal (1) to keep the temperature of said seal (1) low in the case of high temperatures of the wall and/or compressed gas.
- 10 2. The exchanger device according to claim 1, characterized in that said exchanger (3) is a circular exchanger suitable for enveloping said seal (1).
3. The exchanger device according to any of the previous claims, characterized in that said exchanger (3) extends between said seal (1) and the supporting flange (2) of said seal (1).
- 15 4. The exchanger device according to any of the previous claims, characterized in that said exchanger (3) comprises at least one inlet opening (4) and at least one outlet opening (6) of the cooling liquid connected to each other by a coiled path (8).
- 20 5. The exchanger device according to any of the previous claims, characterized in that at least one inlet duct (7) of the seal gas passes through the centre of the exchanger.

6. The exchanger device according to any of the above claims, characterized in that the cooling liquid is water.